

Metropolitan Water Reclamation District of Greater Chicago

# STRATEGIC PLAN 2021-2025 2023 UPDATE



and the

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# **UPDATES AS OF AUGUST 2023**



# The 2021-2025 Strategic Plan concluded its second year in June 2023 and is approximately 30 percent completed.

A majority of the Plan's activities are expected to conclude towards the end of the five-year period, but accomplishments during this second year include:



Achieved 100 percent compliance with National Pollutant Discharge Elimination System requirements at all seven water reclamation plants (WRPs) for three or more years.



Adopted a Climate Action Plan to outline a strategy to reduce greenhouse gas emissions to thwart the devastating effects of global warming, flooding, and pollution that threaten the region's water resources.



### Launched our first-ever Strategic Plan Dashboard

### mwrd.org/strategic-plan

The Dashboard is designed to provide MWRD stakeholders with periodic updates on Strategic Plan progress and developments, and it will incorporate more robust data and improve the user experience as it undergoes subsequent updates.

# Selected 10 area green infrastructure installations

to support, committing more than \$7.6 million in estimated construction costs to bolster resilient communities throughout Cook County and spread a growing allegiance to green infrastructure initiatives to stem the tide of unpredictable rain patterns. Adopted an environmental justice (EJ) policy promoting diversity, equity, and inclusion and integrating EJ considerations into all MWRD programs, policies and activities wherever possible.



**Completed its 34th green schoolyard transformation** to infiltrate over 20 million gallons of water each year, reduce combined sewer overflows (CSO) in our waterways, and establish positive relationships with the community.



**The second annual update to the Plan was completed in August 2023.** The updated Strategic Plan follows and can also be found in the Strategic Plan Dashboard linked above. No changes to the five main Strategic Goals were required, but revisions were needed to their Strategies, Success Measures, and associated Targets.

# INTRODUCTION

### In the fall of 2020, the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago (MWRD) and the MWRD Executive Team began working together to develop the 2021-2025 Strategic Plan.

This new plan builds on the accomplishments of the 2015-2020 Strategic Plan by:

- Articulating the MWRD's strategic goals for the next five years;
- Identifying a set of strategies and initiatives to achieve those goals;
- Providing measures (both qualitative and quantitative) and targets to assess progress;
- Establishing a framework to review and update the Strategic Plan on an annual basis.

A Steering Committee was formed to oversee the effort, which includes the following members:

Commissioner Marcelino Garcia, co-chair Commissioner Debra Shore, co-chair Brian Perkovich, *Executive Director* Mary Ann Boyle, *Treasurer* Susan Morakalis, *General Counsel* John Murray, *Director of Maintenance and Operations* Catherine O'Connor, *Director of Engineering* 

From September 2020 through February 2021, the Steering Committee led a multi-phase strategic planning process, against the backdrop of a global pandemic and the growing threat of climate change, using the lens of racial and social equity in the communities served by the MWRD.

## **Strategic Planning Process**

Outreach was a critical part of the process - including outreach to MWRD staff, local governments, members of the public, and others - to ensure the inclusion of a range of perspectives in the development of the Strategic Plan. It included:

- In-depth interviews with the MWRD's Executive Team and Board of Commissioners;
- A **Workshop**, facilitated by Arup, which engaged approximately 50 attendees, including local governments, community organizations, regional planning and policy organizations, environmental organizations, and others;
- An Employee Survey that garnered almost 550 responses from MWRD staff;
- **Public-facing Surveys** that provided the opportunity for more than 200 members of the public to offer their ideas and feedback;
- A review of internal documents and existing performance measures.

This significant engagement from such a range of interested parties provided valuable guidance on the MWRD's strategic direction, and several consistent themes emerged. Those themes are reflected in the following guiding principles, which informed the strategic planning process.

**Engagement** Including a broad range of interested parties in the creation and implementation of key initiatives.

**Collaboration** Working with other entities to ensure coordinated management of the water ecosystem.

**Innovation** Exploring fresh approaches to key challenges, including through partnerships with universities and other entities.

**Equity** Ensuring the fair treatment, access, opportunity, and advancement of all people, including identifying and eliminating barriers that may have prevented the full participation of some groups.

**Resilience** Anticipating disruptions to the environment, economy, and equity, and addressing them proactively.

The Steering Committee then participated in a two-day Strategic Planning Workshop to consider input from the engagement process. The Committee affirmed that the MWRD's mission remains unchanged, but it refreshed the MWRD's vision of a future state and expanded its values to include equity and diversity. Using these as a high-level framework, the Committee aligned on five overarching strategic goals for the new Strategic Plan.

### Mission

The MWRD will protect the health and safety of the public in its service area, protect the quality of the water supply source (Lake Michigan), improve the quality of water in watercourses in its service area, protect businesses and homes from flood damages, and manage water as a vital resource for its service area.

### Vision

We will continue to be a world-leading wastewater and stormwater management utility focused on flooding mitigation, resource recovery, sustainability, resilience, and innovation.

### Values

Excellence Respect Innovation Safety Equity & Diversity Accountability



The five strategic goals serve as the foundation of the 2021-2025 Strategic Plan roadmap. Working Groups were formed around each strategic goal, including representatives from the MWRD's Executive Team, Board of Commissioners, and more than 50 members of MWRD staff who were selected based on their expertise and commitment to the MWRD's ongoing success. These Working Groups were tasked with the continued development and finalization of 32 strategies that support the five strategic goals, as well as measures to gauge progress. The resulting Strategic Plan was adopted by the Board of Commissioners on June 3, 2021.

## Implementation and Administration

A cross-functional Implementation Team comprising representatives from each department is charged with the coordination and reporting of Strategic Plan efforts and updates. This team also completes the required annual review of the Strategic Plan; the update process includes:

- A high-level review of trends to identify any changes that may affect strategies and initiatives;
- An assessment of any major organizational changes that may impact the Strategic Plan;

 An evaluation of strategies, baseline and stretch targets, and initiatives (which are included in the internal action plan). Progress against each strategy was evaluated, successes and failures examined, and any new issues that need to be addressed were incorporated into the updated Strategic Plan.

The update process is also supported by the Working Groups that were assigned to specific strategic goals, with oversight from the Steering Committee and Executive Team. It is coordinated with the annual budget process, which allows the consideration of updates that require additional resources during the budget process and will ensure that the updated Strategic Plan and annual budget are aligned.

The following pages summarize the MWRD's most current 2021-2025 Strategic Plan. It includes an overview of the MWRD and the community it serves; the overarching strategic goals that will guide the MWRD over the next five years; and strategies to achieve each of those goals. Each strategy is supported by an internal action plan that includes specific initiatives, activities, and timeframes that will be tracked throughout the implementation of the Strategic Plan.



LEFT: A Black Swallowtail enjoys the native prairies at Rutherford Sayre Park located in the Montclare and Galewood neighborhoods. The park is one of dozens of local community spaces that have benefited from the MWRD's Green Infrastructure Program.

## **OVERVIEW**

### The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is an awardwinning, special-purpose district responsible for treating wastewater and providing stormwater management for residents and businesses in Cook County.

With 1,957 employees, it has an annual budget of \$1.4 billion and maintains AAA/ AA+ credit ratings. A nine-member Board of Commissioners governs the MWRD; each Commissioner is elected at large and serves a six-year term.

The MWRD owns and operates seven water reclamation plants, 560 miles of intercepting sewers and force mains, 23 pumping stations, 33 stormwater detention reservoirs, and three Tunnel and Reservoir Plan reservoirs. In addition, the MWRD controls 76.1 miles of navigable waterways, which are part of the inland waterway system connecting the Great Lakes with the Gulf of Mexico. Each day, the MWRD cleans an average of 1.3 billion gallons of wastewater, while recovering and reusing valuable resources such as energy, biosolids, algae, phosphorus, nitrogen, and other nutrients that are removed from the wastewater stream.

The wastewater collection and treatment processes are performed in compliance

with discharge permits issued by the Illinois Environmental Protection Agency (EPA). The MWRD's high level of performance is reflected in its 100% overall compliance with the EPA's National Pollutant Discharge Elimination System (NPDES) requirements in 2022, as well as recognition from the National Association of Clean Water Agencies - including six Platinum and one Gold Peak Performance Awards. In addition, as the stormwater management agency for Cook County, the MWRD partners with communities to build capital improvement and green infrastructure projects that address regional and local flooding issues. The MWRD also administers the Watershed Management Ordinance and manages a flood-prone property acquisition program that removes homes built in the floodplain.

Through these and other efforts, the MWRD is working to manage stormwater, prevent flooding, and build a more resilient Cook County.



LEFT: Aerial views of Battery E1 at the Calumet Water Reclamation Plant (WRP) while the tanks were empty for maintenance in 2022.

## History

# The MWRD has been improving the environment and protecting public health since its inception as the Sanitary District of Chicago in 1889.

At that time, a polluted river flowed directly into Lake Michigan, contaminating the water supply for the City of Chicago and causing waterborne illnesses. The Sanitary District's first priority was reversing the flow of the Chicago and Calumet River Systems to prevent the discharge of sewage into Lake Michigan. Instead, flow was diverted into the Des Plaines River, followed by the Illinois River, and eventually the Mississippi River.

To reverse the river system, the Sanitary District constructed a 61.3-mile system of canals and waterway improvements that cut through the subcontinental dividing ridge, allowing the river to flow by gravity away from the lake. This engineering marvel not only improved environmental conditions for the residents of Chicago but also helped to distinguish the agency around the world and set a tone of visionary environmental engineering accomplishments and scientific breakthroughs. The Sanitary District went on to build a hydropower plant, intercepting sewers, pumping stations, and water reclamation plants to clean water, and the agency's mission grew from protecting the lake to creating a flourishing new waterway system.

These early advancements were followed by a century of innovation, including the construction of the Tunnel and Reservoir Plan (TARP), flood control facilities, aeration stations, nutrient recovery facilities, and green infrastructure projects. From 1955 through 1988, the District was called the Metropolitan Sanitary District of Greater Chicago. In 1989, the name was changed to the Metropolitan Water Reclamation District of Greater Chicago to more accurately reflect the agency's expanding functions and responsibilities.

Today, the MWRD operates one of the world's largest water reclamation facilities, nutrient recovery facilities, wastewater treatment ultra-violet (UV) disinfection installations, and combined sewer reservoirs. It is lauded by the nation's water sector organizations for being forwardthinking, innovative, a leader in sustainability and resilience, and transformative in the way it recovers resources, with recognition in such programs as Utility of the Future Today and Excellence in Management.

**BELOW:** A steam shovel with workers and horses during excavation for the Chicago Sanitary and Ship Canal on June 9, 1894.



## **Community Profile**

# The MWRD's service area encompasses 882.1 square miles and includes the City of Chicago and 128 suburban communities throughout Cook County.

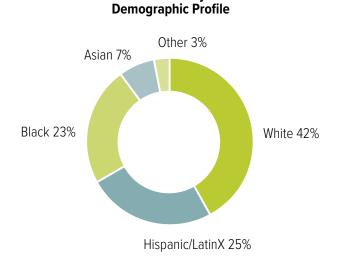
It serves an equivalent population of 12.72 million people; 5.19 million real people, a commercial and industrial equivalent of 5.29 million people, and a combined sewer overflow (CSO) equivalent of 2.24 million people.

As illustrated in the map on the following page, the MWRD provides wastewater treatment services for those communities that lie within its corporate boundary - including most of Cook County. By comparison, the MWRD is the stormwater management agency for all of Cook County.

Cook County is the largest county in Illinois and second-largest in the United States. Cook County's population is diverse, with a demographic profile that is approximately 42% White, 25% Hispanic/LatinX, 23% Black, 7% Asian, and 3% other categories. Its 2017-2021 median household income (in 2021 dollars) was \$72,121, higher than the US average of \$69,021; however, this summary view obscures significant disparities in the average household income of Cook County's 129 municipalities, which reflect long-standing racial inequities in the region. These disparities impact the MWRD because, as illustrated above, individual municipalities – not the MWRD – own and operate their local sewer systems. The MWRD owns large intercepting sewers that receive wastewater from these local systems.

Because different entities own different parts of the sewer system in Cook County, efforts to implement stormwater solutions and alleviate local flooding require close collaboration and partnership between impacted communities and the MWRD. Lowand moderate-income communities may not have the same capacity to partner with the MWRD as high-income communities, and these capacity constraints may serve as a barrier to the equitable implementation of stormwater projects across Cook County.

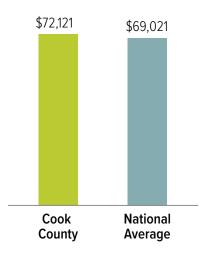
To support participation by all impacted communities regardless of their capacity, the MWRD has identified certain communities as disproportionately impacted areas (DIAs). These communities, illustrated on the following map, are low-to- moderate income areas that may be more susceptible to flooding. Efforts to identify and eliminate barriers to participation are a key focus of the Strategic Plan.



**Cook County** 

2017-2021 Median Household Income

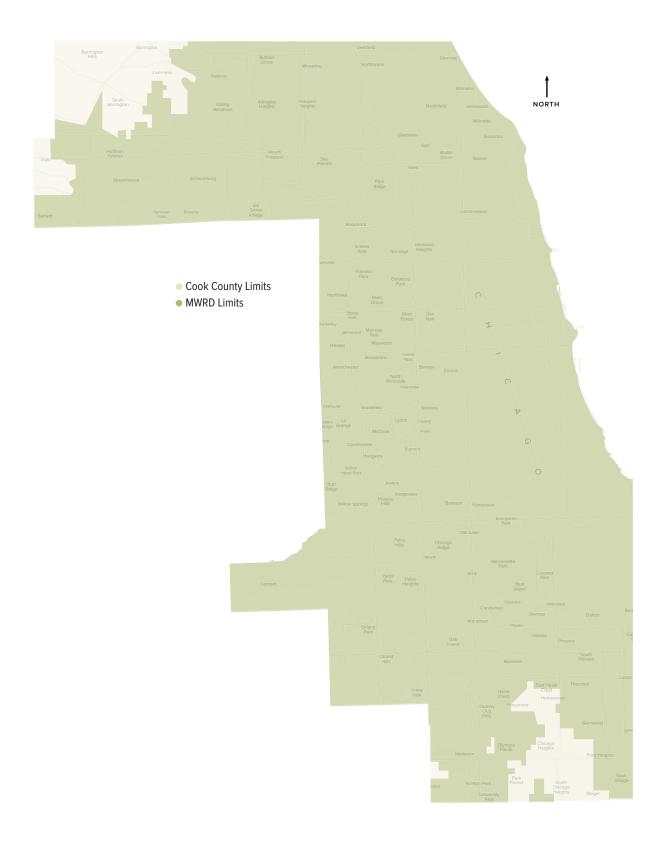
(in 2021 dollars)



Source: https://datausa.io/profile/geo/cook-county-il

Source: https://www.census.gov/quickfacts

# Cook County and Metropolitan Water Reclamation District of Greater Chicago



**Source:** Data USA, Cook County, IL; https://datausa.io/profile/geo/cook-county-il#:~:text=Median%20 Household%20Income,-%2463%2C353&text=Households%20in%20Cook%20County%2C%20 IL,represents%20a%203.17%25%20annual%20growth.

### How Combined Sewers Work In Cook County

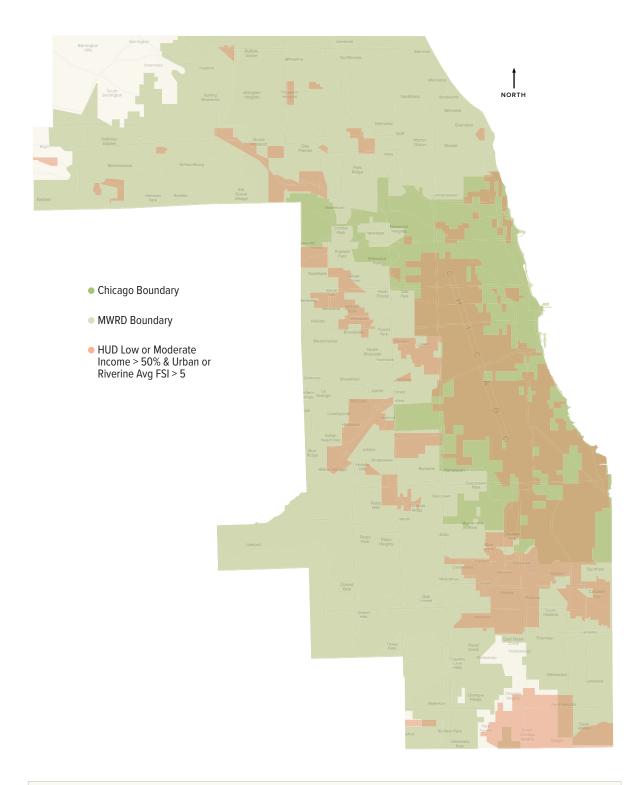


ground, capture and store excess flow during severe

rain events.

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## Disproportionately Impacted Areas (DIAs) in Cook County



**Disproportionately impacted area (DIA):** An area that has a Chicago Metropolitan Agency for Planning (CMAP) Urban or Riverine Flood Susceptibility Index (FSI) mean value of 5-10, as of July 24, 2018, and is within a Low to Moderate Income Area as defined by the U.S. Department of Housing and Urban Development (HUD).

# **TRENDS AND OPPORTUNITIES**

The Strategic Plan must be responsive to significant trends, both positive and negative, that will impact the MWRD and its future success. The impact of climate change is discussed below, as well as key industry trends that continue to spur innovation and collaboration in the water industry.

### **Climate Change**

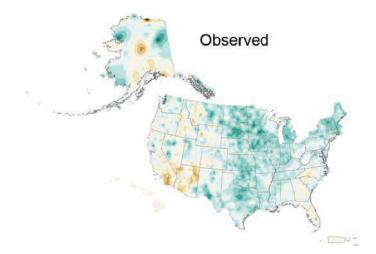
Scientific consensus shows that the earth's climate is changing because of increased levels of greenhouse gases (GHGs) in the atmosphere; these changes are predicted to have some negative consequences. First, as temperatures rise, sea levels will rise due to warmer ocean temperatures and melting glaciers. Rising temperatures are expected to produce two important seasonal conditions in our region: warmer and shorter winters, and warmer and more drought-prone summers. Lastly, warming is expected to accelerate and amplify the hydrological cycle, producing more intense rainfall events.



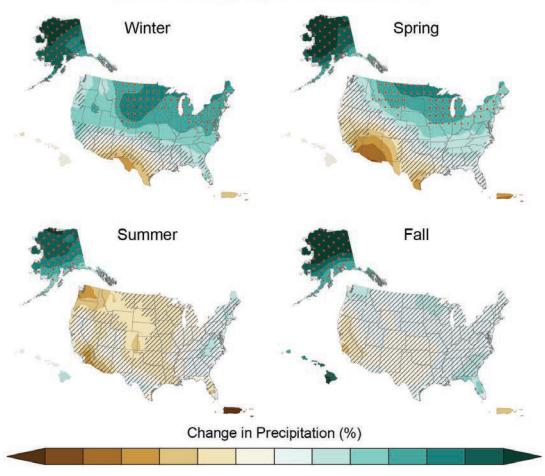
Northeastern Illinois has already experienced such adverse weather events, including record-breaking flooding, heat, and drought. The region broke the record for the most consecutive days above 100°F during the Midwest's drought in 2012, followed by flooding in 2013, 2019, 2020, 2022 and 2023. These repeated incidents have had far-reaching and adverse effects on both the MWRD and the people it serves. The impacts of climate change have significant implications for the region's economy, built environment, ecosystems, and residents. Flooding has led to major road, rail, and utility outages, sewer overflows, mold, damaged property, disruptions to freight traffic, and financial losses for local residents and businesses. Heat waves have caused illnesses, hospitalizations, and deaths in vulnerable populations, and drought has had significant adverse effects on the region's agricultural sector and natural areas impacting the region's economy and ecosystem.

The effects of climate change are also changing our assumptions about water resources, which are predicted to be one of the first significant areas impacted. As climate change warms the atmosphere and alters the hydrological cycle, changes in the amount, timing, form, and intensity of precipitation will continue. The following maps depict projected changes in seasonal precipitation across the United States in the late 21st century. These impacts are likely to affect water and wastewater utilities and efforts to protect water quality, public health, and safety.

On May 4, 2023, the MWRD adopted its Climate Action Plan (CAP), which was developed by an interdepartmental task force and presented for public review prior to adoption. The purpose of the CAP is to outline a path forward to contribute to reducing the carbon footprint for the MWRD and to guide future infrastructure planning, (2) support "climate resiliency infrastructure investment" decisions, (3) guide mitigation of the MWRD's greenhouse gas emissions that contribute to climate change, and (4) adapt to climate change-related impacts.



Late 21st Century, Higher Scenario (RCP8.5)



Source: https://nca2018.globalchange.gov/downloads

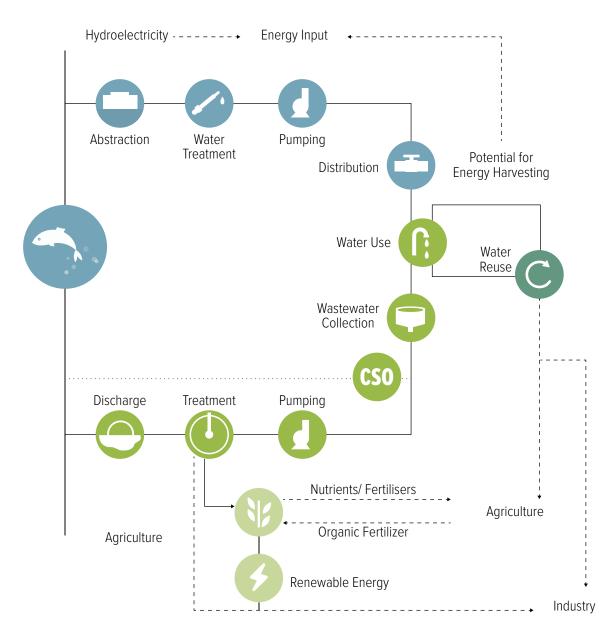
## **Circular Economy**

The three principles of circular economy are designing out waste externalities, keeping resources in use, and regenerating natural capital. Using this approach, materials, water, and products are managed in loops to maintain them at their highest possible intrinsic value.



The diagram below illustrates circular economy principles as applied to a typical water system.

## Simplified View of the Components of a Municipal Water System



**Source:** "Water and Circular Economy: A White Paper," Arup, Ellen MacArthur Foundation, Anteagroup, November 2019, p. 17

Implementing a circular economy approach in the coming years will enhance the MWRD's current operating business model, thereby improving asset productivity, reducing costs and delivering wider benefits, and regenerating the environment. Staff in the MWRD is participating in studies to help expand the circular economy principals.

Circular economy enhancements are included across all aspects of the new Strategic Plan and include:

- New sources of value creation from waste flows and current assets, e.g., resource recovery at water reclamation plants;
- Significant resource productivity improvements (especially energy and chemicals);
- Equitable deployment of nature-based solutions and green infrastructure through partnerships;
- New collaborative ventures across the value chain;
- Creation of new value chains to generate social capital, employment opportunities, and community benefits – including education and skills attainment;
- Greater business resilience and reduced risk; and
- Platforms for long term collaboration and innovation.



LEFT: The recently planted native prairies are thriving at the Buffalo Creek Reservoir, where the MWRD's work expanded the stormwater storage capacity to 300 million gallons while adding two miles of new trails with wetland and prairie enhancements and 850 new trees.

# STRATEGIC GOAL #1: RESOURCE MANAGEMENT

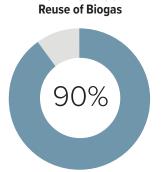
Maintain a high level of performance on the core mission of protecting the public health and area waterways while pursuing opportunities to recover, reuse, and monetize resources.

## **Ongoing Efforts**

The MWRD's seven water reclamation plants treat residential and industrial wastewater and achieved 100% overall compliance with the EPA's National Pollutant Discharge Elimination System (NPDES) requirements in 2022. As regulatory requirements continue to evolve (e.g., upcoming regulations limiting phosphorus contained in treated effluent), the MWRD is implementing innovative technologies and processes to maintain its record of compliance.

In addition, the water that flows into the MWRD's water reclamation plants is treated as a collection of raw resources to be recovered and reused. The MWRD produces clean water as well as sustainable resources like biosolids, energy, and nutrients like phosphorus that are increasing in scarcity and value. Resource recovery is a new frontier that benefits the environment and offers opportunities to recover operational costs. In 2022, the MWRD was able to recover and beneficially reused 90% of its biogas and is 26% energy neutral. To prepare for the future, the MWRD has embarked on an Energy Neutrality Study to maximize the energy embedded in the water that it collects and treats.

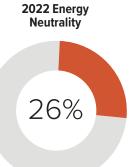
As part of its efforts to proactively address emerging contaminants potentially present in wastewater sent to the MWRD's water



2022 Beneficial

reclamation plants, the MWRD is working to identify per- and polyfluoroalkyl substances (PFAS) discharges to our collection system and urging regulators such as the USEPA to use their tools to stop these chemicals at the source.

Finally, Strategic Goal #1 underscores the MWRD's strong commitment to engaging with the research community and harnessing the expertise of its skilled staff to foster innovation in the water sector. The MWRD actively collaborates with universities, water associations. and technology incubators to drive transformative advancements in the water sector. Esteemed institutions like regional universities, The Water Research Foundation, Water Environment Federation, Current Water, federal institutions like Argonne National Laboratory, Fermilab, and the National Renewable Energy Laboratory are key partners in this effort. By actively participating in research initiatives, the MWRD benefits from collective wisdom and expertise, creating a dynamic environment for knowledge exchange and the exploration of groundbreaking ideas. These partnerships also enable the MWRD to stay at the forefront of technological advancements and contribute to shaping the future of the water industry.



# 2021 - 2025 Resource Management Strategies

Strategy	Success Measure	Baseline Target	Stretch Target
1. Maintain high level of permit compliance as requirements evolve; continue efforts to improve water quality	NPDES permit compliance	100%	100% for 5 consecutive years
2. N/A - Strategy 2 has been moved to Storm	water Management as Strateg	gy 7.	
<b>3.</b> Manage MWRD assets to maintain optimal performance and long-term sustainability maintain optimal performance and long-term sustainability	Average days to complete a work order	40% reduction by 2024: P1 – 9.7 P2 – 55.9 P3 – 40.8 P4 – 44.3	P1 — maintain under 10 days P2 — under 55 days P3 — under 35 days P4 — under 40 days
<ol> <li>Pursue resource recovery opportunities to increase sustainability and recover costs</li> </ol>	Biogas utilization	Develop plan to achieve 100% utilization	100% utilization
	Internal effluent reuse	1% of total treated effluent used internally	3% of total treated effluent used internally
<ol> <li>Develop Innovation Ecosystem – drive innovation through partnerships with water associations, universities, labs,</li> </ol>	Number of ongoing/pilot full-scale research studies	10 studies per year	15 studies per year
water technology firms, etc.	Number of external partner projects aligned with Strategic Goals	20 projects per year	25 projects per year

The targets' due dates are the end of the five-year Strategic Plan unless otherwise specified.

# STRATEGIC GOAL #2: STORMWATER MANAGEMENT

Continue to mitigate flooding across Cook County through a proactive, equitable stormwater management program, including implementation of gray and green infrastructure, enforcement of the Watershed Management Ordinance (WMO), and acquisition of flood-prone property.

## **Ongoing Efforts**

The MWRD partners with communities to build capital improvement and green infrastructure projects that address regional and local flooding issues and manages a flood-prone property acquisition program that removes homes built in the floodplain. To date, the MWRD has advanced over 200 stormwater management projects. These projects incorporate elements of both gray and green infrastructure, ranging in size from massive reservoirs to green alleys and permeable parking lots. One example is the Space to Grow program, which implements green infrastructure in schoolyards while creating vibrant places to play and learn through a partnership with Chicago Public

Schools, the Chicago Department of Water Management, Healthy Schools Campaign, and Openlands.

The MWRD also administers the WMO, which regulates sewer construction within the MWRD's service area and development within suburban Cook County.

A recent update to the WMO reflects current conditions, including increasing stormwater detention requirements based on the Illinois State Water Survey's Updated Bulletin 75 rainfall data (published in March 2019), which indicated that annual average rainfall across Illinois has increased by 11 percent over the past century.



LEFT: The MWRD completed construction of the Addison Creek Reservoir and formally opened it at a ribbon cutting in August 2023. The 600-acrefoot reservoir will hold close to 200 million gallons of stormwater and, along with the Addison Creek **Channel Improvement** project, will help alleviate public health and safety concerns by reducing overbank flooding to approximately 2,200 structures along the creek for businesses and residents in Northlake, Stone Park, Melrose Park, Bellwood, Westchester and Broadview.

# 2021 - 2025 Stormwater Management Strategies

Strategy	Success Measure	<b>Baseline Target</b>	Stretch Target
1. Develop comprehensive framework to guide proactive implementation of stormwater solutions across Cook County	Coverage of Stormwater Masterplans	75% coverage of service area	100% coverage of service area
<ol> <li>Partner with local communities to significantly increase stormwater management projects</li> </ol>	Expansion of green infrastructure (GI) project and local partnership project (LSP) partnerships with municipal agencies	92 projects	120 projects
	Expansion of GI and LSP partnerships with non- municipal agencies (e.g., park districts, school districts, etc.)	30 projects	45 projects
3. Ensure that stormwater	Increased number of projects	Local projects: 20%	Local projects: 25%
management programs support participation by all communities, regardless of local capacity	submitted from underserved areas prone to flooding	Green infrastructure: 30%	Green infrastructure: 50%
4. Identify and pursue opportunities for partnering on multi-benefit projects and for coordination with other agencies to minimize cost of stormwater management projects	Portion of projects that receive funding from agencies and organizations other than the MWRD and the immediate partnering agency	20%	25%
<ol> <li>Identify and pilot stormwater management best practices and innovation; scale most promising practices</li> </ol>	Number of best practices for which pilot study has started in past 5 years	2 practices	3 practices
<ol> <li>Partner with climate scientists to model long- term regional climate changes and impact on flooding</li> </ol>	Number of partnerships with agencies and universities on climate research related to impacts of flooding	1 partnership	2 partnerships
	Number of watersheds where hydrological models are updated with new rainfall data	2 out of 6 watersheds	3 out of 6 watersheds
7. Monitor and continue to reduce CSOs into area waterways. [Transferred into SM from RM2]	TARP completion	80% of McCook Stage 2 Mining and 100% of Des Plaines Inflow Tunnel	85% of McCook Stage 2 Mining and 100% of Des Plaines Inflow Tunnel
	Outreach to Chicago/other municipalities regarding TARP, using green infrastructure to reduce CSOs, etc.	Develop outreach program and team	Hold regular meetings; develop additional joint projects to address CSOs

The targets' due dates are the end of the five-year Strategic Plan unless otherwise specified.

# STRATEGIC GOAL #3: WORKFORCE EXCELLENCE

Invest in the future by investing in employees; continue to recruit, develop, and retain best-in-class employees as the foundation of the MWRD's ongoing success.

## **Ongoing Efforts**

The MWRD continues to focus on recruiting and retaining a talented and diverse workforce that reflects the communities it serves. Core recruitment strategies utilized to source qualified candidates include advertising on online job boards, participating in community job fairs and career development events, partnering with on-campus student organizations and state workforce development agencies, and engaging college students through the summer internship program. In each of these strategies, the MWRD looks for opportunities to reach diverse candidates and source from underrepresented communities across the MWRD's service area. To further these diversity efforts, the MWRD appointed a new Human Resources Manager position dedicated to diversity, equity, and inclusion. This position will develop a Diversity, Equity, and Inclusion (DEI) Plan and implement initiatives to aid in recruiting diverse talent to the organization

and creating a collaborative and inclusive environment for all employees.

Another major focus of the MWRD plan to achieve its workforce excellence goal is fostering a culture that recognizes the value of every employee. It is important that all employees feel they are valued by the organization and that they play an important role in accomplishing the MWRD mission. In 2023, the Human Resources Department conducted an organizationwide employee survey on a broad range of topics including employee development, employee engagement and communication. compensation and benefits, supervisory relationships, diversity and inclusion, District culture, and overall job satisfaction. The data gathered during this survey provides the organization with critical insights into the perspective of MWRD employees. It will allow the development of strategic initiatives focusing on specific areas that employees value.



LEFT: Laboratory Technician II Heather Wontor works in the Calumet Water Reclamation Plant lab in Chicago conducting water quality tests and analysis.

# 2021 - 2025 Workforce Excellence Strategies

Strategy	Success Measure	Baseline Target	Stretch Target
<ol> <li>Foster a culture that recognizes the value of every employee</li> </ol>	Employees feel they are valued equitably (including intrinsic rewards, feelings of respect, job satisfaction)	Baseline score established for job satisfaction by the end of 2023	Continual improvement in annual employee satisfaction survey score through 2025
	Employees understand their value and role in accomplishing the MWRD's mission	Baseline score established for employee engagement by the end of 2023	Continual improvement in annual employee engagement survey score through 2025
<ol> <li>Provide a workplace environment that meets evolving needs</li> </ol>	Reduction in voluntary separations (excluding retirements)	Downward trend	Downward trend by 2024
3. Ensure that the performance evaluation system tied to measurable competencies and distinguishes between different levels of performance	Employees are participating in their individual personal development plans	Training/communication provided regarding inclusion of personal development plans in performance evaluations in 2023	80% of performance evaluations include a personal development plan by 2025
<ol> <li>Ensure that roles and descriptions evolve with industry trends and strategic direction</li> </ol>	Classification plan and organizational structure align with operational needs and strategic goals	30% of the job classifications reviewed by the end of 2023	100% of job classifications reviewed by 2025
<ol> <li>Provide ongoing training to supervisory staff regarding coaching and giving feedback</li> </ol>	Percentage of supervisors trained	100% of supervisors have received coaching training by the end of 2023	100% of staff are receiving annual coaching training by 2025
<ol> <li>Continue to offer all staff a baseline training allocation</li> </ol>	Employees meeting established training targets	75% by 2024	100% by 2025
7. Identify and scale existing best practices for staff advancement and promotion within civil service system	Employees are pursuing promotional opportunities	Baseline percentage of eligible promotional candidates participating in civil service exams established by the end of 2023	Year-over-year improvement in the percentage of eligible promotional candidates participating in civil service exams through 2025
B. Continue to develop targeted recruitment, mentoring, and professional development programs to increase diverse representation in key job categories	Positive trend in minority and female internal workforce rates in key job categories	Increased internal workforce rates in key job categories by 2025	Increased internal workforce rates in key job categories by 2024

The targets' due dates are the end of the five-year Strategic Plan unless otherwise specified.

# STRATEGIC GOAL #4: COMMUNITY ENGAGEMENT

Engage with the community to position the MWRD as a critical community asset and to ensure that the MWRD is a responsive neighbor and inclusive business partner.

## **Ongoing Efforts**

The MWRD's Board of Commissioners and talented staff of scientists, engineers, and water experts speak in communities and classrooms and take leadership roles in professional organizations. In addition, the MWRD hosts thousands of visitors for tours of its water reclamation plants, pumping stations, and other facilities to educate members of the public and encourage their participation in helping to protect the water environment. The MWRD also holds open houses for all ages, distributes free oak tree saplings, and participates in public outreach events.

The MWRD's Diversity Section continues to fulfill its community leadership role regarding contract and employment diversity in the MWRD's service communities by establishing and monitoring goals for minority-, women-, and veteranowned Business Enterprises.



LEFT: MWRD Public Affairs Specialist Melvin Laureano provides information and fun learning materials during the Open House at the Stickney Water Reclamation Plant.

# 2021 - 2025 Community Engagement Strategies

Strategy	Success Measure	Baseline Target	Stretch Target
<ol> <li>Develop and express consistent branding and messaging to all audiences</li> </ol>	Branding and graphic standards in place and used consistently across all MWRD touch points	80% in use	95% in use
<ol> <li>Raise public awareness of the value of the District's work and encourage public involvement</li> </ol>	Number of requests for educational services and speakers	80% increase	100% increase
<ol> <li>Expand partnerships, outreach, and engagement to new audiences</li> </ol>	Number of new partnerships	s 10% increase by December 2022	20% increase by December 2022
	Number of social media followers (Facebook, Twitter, LinkedIn, YouTube)	10% increase by December 2022	20% increase by December 2022
	Number of attendees who participate in outreach events and presentations	10% increase by December 2022	20% increase by December 2022
	Number of website pageviews	10% increase by December 2022	20% increase by December 2022
<ol> <li>Enhance the experience of vendors that do business with the MWRD</li> </ol>	Number of bidders on contracts	10% increase	20% increase
	Reduction in the time from award to start date of the contract and agreement	Within 45 days of award	Within one month of award
<ol> <li>Increase diverse participation in MWRD contracts</li> </ol>	Number of diverse vendors newly engaging with the MWRD	Year-over-year increase	Year-over-year increase by 2024
6. Expand partnerships and focus outreach (internal and external) on specific groups	Number of new partnerships	Year-over- year increase	Year-over- year increase by 2024

The targets' due dates are the end of the five-year Strategic Plan unless otherwise specified.

# STRATEGIC GOAL #5: ENTERPRISE RESILIENCE

Ensure ongoing services that are reliable, equitable, and cost-effective; achieve climate change and environmental justice protections; prepare for other manmade and natural events; strengthen the MWRD's operational and financial positions.

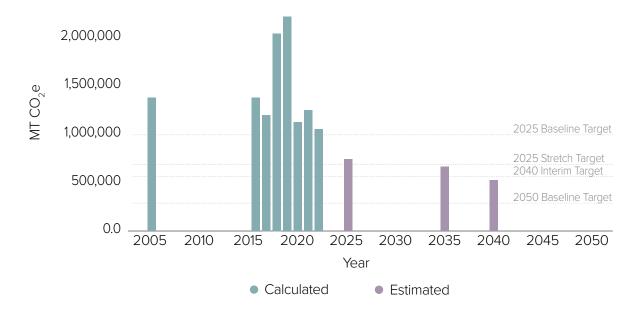
### **Ongoing Efforts**

On May 4, 2023, the MWRD adopted a Climate Action Plan (CAP) to outline a path forward for the agency to contribute to reducing its carbon footprint and adapt to climate change-related impacts. It will be used to: (1) inform future infrastructure planning; (2) support climate resiliency infrastructure investment decisions: (3) guide mitigation of the MWRD's greenhouse gas emissions; and (4) inform the public of the MWRD's plans to address climate change. The CAP was developed by an interdepartmental task force and presented for public review prior to adoption by the Board. Through the CAP, the MWRD aims to reduce its greenhouse gas emissions in accordance with the Paris Agreement and to provide an integrated approach to addressing challenges in continuing to deliver affordable wastewater treatment and stormwater management services.

To increase visibility around performance indicators, a dashboard has been integrated into the MWRD's website. This dashboard tracks progress around metrics identified in the Strategic Plan.

The agency has also implemented ongoing efforts to assure the continuity of operations in adverse circumstances, including annual updates to the agency's Emergency Operations Plan (EOP), Business Continuity Plan (BCP), and Critical Operational Guidance Documents (COGs), as well as regular exercises to test its emergency response plans.

The MWRD continues to maintain a AAA bond rating from Fitch Ratings and a AA+ bond rating from Standard & Poor's. Its funding policies for both its Retirement Fund and Other Postemployment Benefits Fund demonstrate a commitment to long- term fiscal management and contribute to the MWRD's strong credit ratings.



# 2021 - 2025 Enterprise Resilience Strategies

Strategy	Success Measure	<b>Baseline Target</b>	Stretch Target
<ol> <li>Proactively expand efforts to strengthen functionality in the face of future events; finalize and implement climate change and resiliency plans</li> </ol>	Reduction of greenhouse gas (GHG) emissions in accordance with Paris Agreement and Board Resolution File #17 0728	28% reduction of 2005 GHG emissions	50% reduction of 2005 GHG emissions
<ol> <li>Assure agency resilience and readiness for effective response to emergencies that could put at risk the health and safety of employees, negatively affect operations,</li> </ol>	Emergency plans are updated regularly, incorporating learnings, as appropriate	Annual update	Real time, if online
disrupt essential services, or put at risk the general public	Emergency exercises are conducted	Annual exercise	2-3 exercises/year
	Risk assessment activities are conducted periodically and inform emergency plans and exercises	Risk assessment project undertaken in Year 3	Risk assessment project undertaken in Year 2
	Cyber security maturity assessment (baseline document)	Maintain Level 3	Level 4
<ol> <li>Support innovation and harness problem- solving capacity at all organizational levels (includes Strategy 4)</li> </ol>	Number of employees publicly recognized for innovation and problem-solving	10% year-over- year increase	20% year-over- year increase
	Number of problems solved annually through task forces	Increasing each year	Doubling each year
4. N/A - Strategy 4 has been incorporated into Str	ategy 3.		
5. Pursue process and system improvements	Number of processes that have been improved	1 process per year	Up to 2 processes per year
<ol> <li>Maintain strong fiscal management; identify and leverage opportunities for cost reduction and cost recovery</li> </ol>	Strong credit ratings	ΑΑΑ/ΑΑ+	ΑΑΑ/ΑΑΑ
<ol> <li>Increase visibility around goals and performance indicators</li> </ol>	Centralized, public-facing, interactive reporting around Strategic Plan and goals that is easy to use	One operational system online by the end of December 2022	One operational system online by December 2022

The targets' due dates are the end of the five-year Strategic Plan unless otherwise specified.

# CONCLUSION

Since undertaking the extraordinary feat of reversing the flow of the Chicago River to protect Lake Michigan, the MWRD has engaged in more than a century of progress and continuous innovation to care for the region's water environment. Today, that record of innovation continues as the agency works to develop comprehensive solutions to manage stormwater and prevent flooding, while implementing emerging technologies to improve water quality and protect a river that is soaring in popularity. The MWRD is developing new systems to reduce nutrients in treated water, decreasing greenhouse gas emissions, conserving and reusing water, recovering

renewable resources, and maintaining a tradition of reliability and resourcefulness.

The 2021-2025 Strategic Plan lays out the specific goals, strategies, and success measures that will guide the MWRD over the next five years. It was developed with significant engagement from the Board of Commissioners, MWRD leadership and staff, local governments, members of the public, and others. The implementation of the Strategic Plan will continue to prioritize collaboration - actively forming new partnerships and engaging with communities - to build a more resilient Cook County.

**BELOW:** A boat cruises along the Chicago Sanitary and Ship Canal near the MWRD's McCook Reservoir, which is a major part of the Tunnel and Reservoir Plan.





**ABOVE:** A member of a herd of goats and sheep dines on vegetation at the O'Brien Water Reclamation Plant, helping the MWRD maintain landscaping by safely consuming invasive species and thick native prairie landscaping as high as 10 feet.

### Metropolitan Water Reclamation District of Greater Chicago

#### **Board of Commissioners**

Kari K. Steele President

Patricia Theresa Flynn Vice President

Marcelino Garcia Chairman of Finance

**Executive Director** Brian A. Perkovich

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Established in 1889, the MWRD is an award-winning, special purpose government agency responsible for wastewater treatment and stormwater management in Cook County, Illinois.